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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,324	09/30/2003	Yung-Hui Yeh	YEHY 3001 / EM	2255
23364	7590	09/30/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			SANTIAGO, MARICELI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,324	Applicant(s) YEH ET AL.	
	Examiner Mariceli Santiago	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form.

Claim 9 recites the limitation "wherein the organic light emitting diode is organic light emitting diode" which is considered to be a redundant recitation not further limiting the previous claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 6,038,006) in view of Matsuoka et al. (US 20020192576).

Regarding claim 1, Sasaki discloses an active matrix display structure (Fig. 2) comprising a glass substrate (21), an active component layer (27) disposed on the glass substrate, an intermediate insulate layer (32) disposed on the top of the active component layer, a color filter area (33) disposed on part of the surface of the intermediate insulate layer, an electrical conducting layer (25) disposed above the color filter area, a black matrix layer (34) disposed on the top surface of the electrical conducting layer and cover margins of the color filter area. Sasaki fails to exemplify the active matrix structure used for an active organic light

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emitting diode display structure further comprising an organic light emitting diode layer disposed on the black matrix layer, and a cathode layer disposed on the organic light emitting diode layer. However, in the same field of endeavor, Matsuoka discloses an active matrix display substrate (Fig. 5) for used in liquid crystal displays or organic EL displays, wherein when the active matrix display is an organic EL display (Fig. 11) it further comprises an organic light emitting diode layer (510) disposed over an anode element (502), and a cathode layer (520) disposed on the organic light emitting diode layer. Accordingly, one skilled in the art at the time of the invention would reasonable contemplate the use and successful performance of the active matrix substrate disclosed by Sasaki in organic light emitting devices as evidenced by Matsuoka's teachings.

Regarding claim 3, Sasaki discloses an active matrix display structure wherein the active component layer is a buffer layer having poly-Si thin film transistors (Column 3, lines 46-60).

Regarding claim 4, Sasaki discloses an active matrix display structure wherein the color filter area is coated on an area of the surface of the intermediate insulate layer (Fig. 2).

Regarding claim 5, Sasaki discloses an active matrix display structure wherein the electrical conducting layer is an indium tin oxide (ITO) layer (Column 4, lines 15-18).

Regarding claim 7, Sasaki discloses an active matrix display structure wherein the black matrix layer is a black photo-resist thin film (Column 5, lines 5-22).

Regarding claim 8, Sasaki discloses an active matrix display structure wherein the black matrix layer is disposed on the top surface of the electrical conducting layer, the black matrix layer has an opening, the opening is located above the color filter area, the area of the opening is slightly smaller than the area of the color filter area, and the black matrix layer covers margins of the color filter area as well as the non color filter area (Figs. 1-2).

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Regarding claim 9, Sasaki discloses an active matrix display structure wherein the organic light emitting diode is organic light emitting diode.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 6,038,006) in view of Matsuoka et al. (US 20020192576), in further view of Yamada (US 6,246,179).

Regarding claim 2, the references Sasaki-Matsuoka fail to disclose the limitation of the glass substrate being made of non-alkali glass. However, in the same field of endeavor, Yamada discloses an organic light-emitting device comprising a glass substrate being made of non-alkali glass (Column 5, lines 38-41). One skilled in the art would reasonable contemplate selection of a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have the glass substrate being made of non alkali glass, since the selection of known materials for a known purpose is within the skill of the art.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 6,038,006) in view of Matsuoka et al. (US 20020192576), in further view of Kadota et al. (US 5,818,550).

Regarding claim 6, the references Sasaki-Matsuoka fail to exemplify the black matrix layer being a metal thin film. However, in the same field of endeavor, Kadota discloses the use of a metal thin film layer as a black matrix on the driving active region of the display (Column 7, lines 29-35). One skilled in the art would reasonable contemplate selection of a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re*

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Leshin, 125 USPQ 416. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to have the black matrix layer being a metal thin film, since the selection of known materials for a known purpose is within the skill of the art.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MS 9/27/05
Mariceli Santiago
Primary Examiner
Art Unit 2879